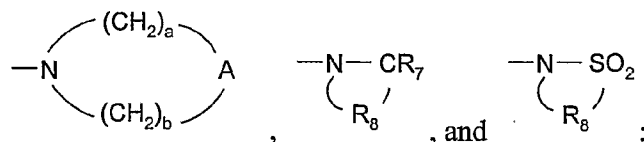


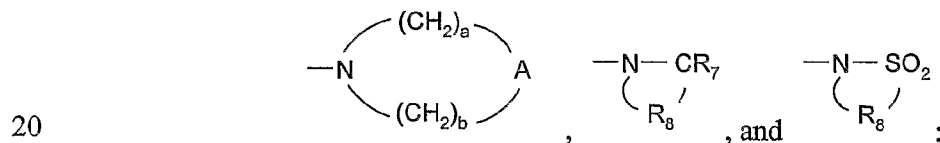
-X-R<sub>5</sub>,  
 -X-N(R<sub>6</sub>)-Y-R<sub>4</sub>,  
 -X-C(R<sub>7</sub>)-N(R<sub>6</sub>)-R<sub>4</sub>, and  
 -X-O-R<sub>4</sub>;

5 or R<sub>1</sub>' and R<sub>1</sub> together with the nitrogen atom to which they are bonded can join to form a group selected from the group consisting of:



R<sub>4</sub> is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, heteroaryl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, carboxy, formyl, aryl, aryloxy, arylalkoxy, heteroaryl, heteroaryloxy, heteroarylalkoxy, heterocyclyl, heterocyclylalkylenyl, amino, alkylamino, (arylalkylenyl)amino, dialkylamino, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo, with the proviso that when R<sub>4</sub> is a substituted alkyl group and the substituent contains a hetero atom which bonds directly to the alkyl group then the alkyl group contains at least two carbons between the substituent and the nitrogen atom to which R<sub>1</sub> is bonded;

R<sub>5</sub> is selected from the group consisting of:



each R<sub>6</sub> is independently selected from the group consisting of hydrogen, alkyl, and arylalkylenyl;

R<sub>7</sub> is selected from the group consisting of =O and =S;

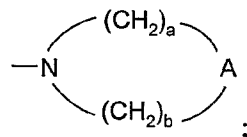
R<sub>8</sub> is C<sub>2-7</sub> alkylene;

25 A is selected from the group consisting of -CH(R<sub>6</sub>)-, -O-, -N(R<sub>6</sub>)-, -N(Y-R<sub>4</sub>)-, and -N(X-N(R<sub>6</sub>)-Y-R<sub>4</sub>)-;

X is C<sub>2-20</sub> alkylene;

Y is selected from the group consisting of -C(R<sub>7</sub>)-, -C(R<sub>7</sub>)-O-, -S(O)<sub>2</sub>-,

-S(O)<sub>2</sub>-N(R<sub>6</sub>)-, and -C(R<sub>7</sub>)-N(R<sub>9</sub>)-; wherein R<sub>9</sub> is selected from the group consisting of hydrogen, alkyl, and arylalkylenyl; or R<sub>9</sub> and R<sub>4</sub> together with the nitrogen atom to which R<sub>9</sub> is bonded can join to form the group



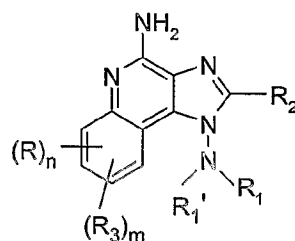
5            a and b are independently integers from 1 to 4 with the proviso that when A is -O-, -N(R<sub>6</sub>)-, -N(Y-R<sub>4</sub>)-, or -N(X-N(R<sub>6</sub>)-Y-R<sub>4</sub>)- then a and b are independently integers from 2 to 4; and

             R" is hydrogen or a non-interfering substituent;  
or a pharmaceutically acceptable salt thereof.

10

6.        The compound or salt of claim 5 wherein the compound or salt induces the biosynthesis of one or more cytokines.

7.        A compound of the Formula (I-1):



I-1

wherein:

R<sub>1</sub>' is selected from the group consisting of hydrogen and alkyl;

R<sub>1</sub> is selected from the group consisting of:

20

-R<sub>4</sub>,

-Y-R<sub>4</sub>,

-X-R<sub>5</sub>,

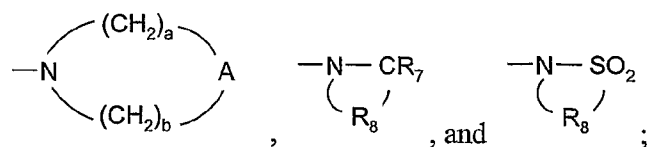
-X-N(R<sub>6</sub>)-Y-R<sub>4</sub>,

-X-C(R<sub>7</sub>)-N(R<sub>6</sub>)-R<sub>4</sub>, and

25

-X-O-R<sub>4</sub>;

or R<sub>1</sub>' and R<sub>1</sub> together with the nitrogen atom to which they are bonded can join to form a group selected from the group consisting of:



R<sub>2</sub> is selected from the group consisting of:

- 5            -hydrogen,
- alkyl,
- alkenyl,
- aryl,
- heteroaryl,
- 10          -heterocyclyl,
- alkylene-Z-alkyl,
- alkylene-Z-aryl,
- alkylene-Z-alkenyl, and
- alkyl or alkenyl substituted by one or more substituents selected from the
- 15          group consisting of:
- OH,
- halogen,
- N(R<sub>6</sub>)<sub>2</sub>,
- C(R<sub>7</sub>)-N(R<sub>6</sub>)<sub>2</sub>,
- 20          -S(O)<sub>2</sub>-N(R<sub>6</sub>)<sub>2</sub>,
- N(R<sub>6</sub>)-C(R<sub>7</sub>)-C<sub>1-10</sub> alkyl,
- N(R<sub>6</sub>)-S(O)<sub>2</sub>-C<sub>1-10</sub> alkyl,
- C(O)-C<sub>1-10</sub> alkyl,
- C(O)-O-C<sub>1-10</sub> alkyl,
- 25          -N<sub>3</sub>,
- aryl,
- heteroaryl,
- heterocyclyl,
- C(O)-aryl, and
- 30          -C(O)-heteroaryl;

R<sub>3</sub> is selected from the group consisting of:

- Z'-R<sub>4</sub>'
- Z'-X'-R<sub>4</sub>'
- Z'-X'-Y'-R<sub>4</sub>', and
- Z'-X'-R<sub>5</sub>';

5

each R is independently selected from the group consisting of alkyl, alkenyl, alkoxy, halogen, fluoroalkyl, hydroxy, amino, alkylamino, and dialkylamino;

n is an integer from 0 to 4;

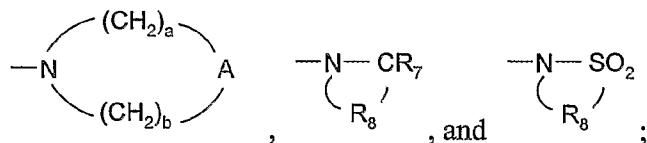
m is 0 or 1; with the proviso that when m is 1, then n is 0 or 1;

10

R<sub>4</sub> is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, heteroaryl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, carboxy, formyl, aryl, aryloxy, arylalkoxy, heteroaryl, heteroaryloxy, heteroarylalkoxy, heterocyclyl, heterocyclylalkylenyl, amino, alkylamino, (arylalkylenyl)amino, dialkylamino, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo, with the proviso that when R<sub>4</sub> is a substituted alkyl group and the substituent contains a hetero atom which bonds directly to the alkyl group then the alkyl group contains at least two carbons between the substituent and the nitrogen atom to which R<sub>1</sub> is bonded;

20

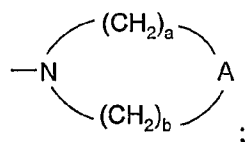
R<sub>5</sub> is selected from the group consisting of:



X is C<sub>2-20</sub> alkylene;

Y is selected from the group consisting of -C(R<sub>7</sub>)-, -C(R<sub>7</sub>)-O-, -S(O)<sub>2</sub>-, -S(O)<sub>2</sub>-N(R<sub>6</sub>)-, and -C(R<sub>7</sub>)-N(R<sub>9</sub>)-; wherein R<sub>9</sub> is selected from the group consisting of hydrogen, alkyl, and arylalkylenyl; or R<sub>9</sub> and R<sub>4</sub> together with the nitrogen atom to which R<sub>9</sub> is bonded can join to form the group

25



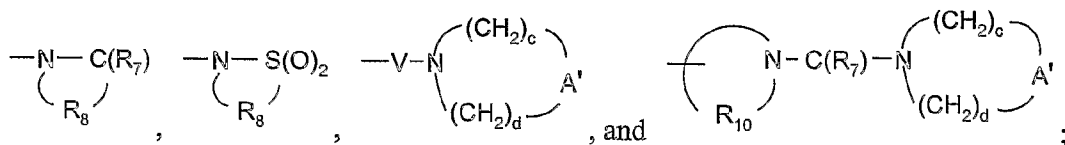
Z is selected from the group consisting of -O- and -S(O)<sub>0-2</sub>;

A is selected from the group consisting of -CH(R<sub>6</sub>)-, -O-, -N(R<sub>6</sub>)-, -N(Y-R<sub>4</sub>)-, and -N(X-N(R<sub>6</sub>)-Y-R<sub>4</sub>)-;

a and b are independently integers from 1 to 4 with the proviso that when A is  
5 -O-, -N(R<sub>6</sub>)-, -N(Y-R<sub>4</sub>)-, or -N(X-N(R<sub>6</sub>)-Y-R<sub>4</sub>)- then a and b are independently integers from 2 to 4;

R<sub>4</sub>' is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl wherein the alkyl, alkenyl,  
10 alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy,  
15 heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R<sub>5</sub>' is selected from the group consisting of:



20 X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated by arylene, heteroarylene, or heterocyclylene and optionally interrupted by one or more -O- groups;

Y' is selected from the group consisting of:

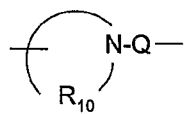
25 -S(O)<sub>0-2</sub>-,  
-S(O)<sub>2</sub>-N(R<sub>11</sub>)-,  
-C(R<sub>7</sub>)-,  
-C(R<sub>7</sub>)-O-,  
-O-C(R<sub>7</sub>)-,  
30 -O-C(O)-O-,

-N(R<sub>11</sub>)-Q-,

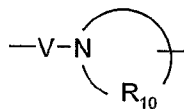
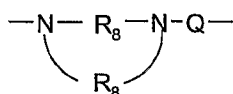
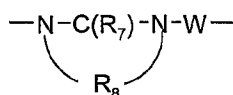
-C(R<sub>7</sub>)-N(R<sub>11</sub>)-,

-O-C(R<sub>7</sub>)-N(R<sub>11</sub>)-,

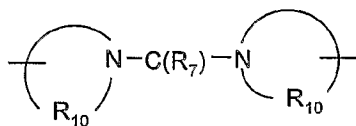
-C(R<sub>7</sub>)-N(OR<sub>12</sub>)-,



5



, and



;

10

Z' is a bond or -O-;

A' is selected from the group consisting of -CH<sub>2</sub>-, -O-, -C(O)-, -S(O)<sub>0-2</sub>-, and -N(R<sub>4</sub>')-;

Q is selected from the group consisting of a bond, -C(R<sub>7</sub>)-, -C(R<sub>7</sub>)-C(R<sub>7</sub>)-, -S(O)<sub>2</sub>-, -C(R<sub>7</sub>)-N(R<sub>11</sub>)-W-, -S(O)<sub>2</sub>-N(R<sub>11</sub>)-, -C(R<sub>7</sub>)-O-, and -C(R<sub>7</sub>)-N(OR<sub>12</sub>)-;

15

V is selected from the group consisting of -C(R<sub>7</sub>)-, -O-C(R<sub>7</sub>)-, -N(R<sub>11</sub>)-C(R<sub>7</sub>)-, and -S(O)<sub>2</sub>-;

W is selected from the group consisting of a bond, -C(O)-, and -S(O)<sub>2</sub>-;

c and d are independently integers from 1 to 6 with the proviso that c + d is ≤ 7, and when A' is -O- or -N(R<sub>4</sub>')- then c and d are independently integers from 2 to 4;

20

each R<sub>6</sub> is independently selected from the group consisting of hydrogen, alkyl, and arylalkylenyl;

each R<sub>7</sub> is independently selected from the group consisting of =O and =S;

each R<sub>8</sub> is independently C<sub>2-7</sub> alkylene;

R<sub>10</sub> is C<sub>3-8</sub> alkylene;

each  $R_{11}$  is independently selected from the group consisting of hydrogen,  $C_{1-10}$  alkyl,  $C_{2-10}$  alkenyl,  $C_{1-10}$  alkoxy $C_{2-10}$  alkylenyl, and aryl $C_{1-10}$  alkylenyl; and

$R_{12}$  is selected from the group consisting of hydrogen and alkyl; or a pharmaceutically acceptable salt thereof.

5

8. The compound or salt according to claim 7 wherein  $R_1$  is selected from the group consisting of  $-R_4$ ,  $-Y-R_4$ , and  $-X-N(R_6)-Y-R_4$  wherein Y is  $-C(R_7)-$ ,  $-S(O)_2-$ , or  $-C(R_7)-N(R_9)-$ .

10

9. The compound or salt according to claim 8 wherein  $R_1$  is selected from the group consisting of hydrogen, alkyl, alkenyl, arylalkylenyl, arylalkenylenyl, heteroarylalkylenyl, heteroarylalkenylenyl, aminoalkylenyl, alkoxyalkylenyl, acyl, alkylsulfonylaminoalkylenyl, arylsulfonylaminoalkylenyl, alkylaminocarbonyl, arylaminocarbonyl, (arylalkylenyl)aminoalkylenyl, heterocyclylcarbonylaminoalkylenyl, and arylaminocarbonylaminoalkylenyl.

15

10. The compound or salt according to claim 9 wherein  $R_1$  is selected from the group consisting of hydrogen, methyl, isopropyl, butyl, 2-methylpropyl, 1-ethylpropyl, 3-methylbutyl, cyclohexyl, benzyl, 3-phenylpropyl, cinnamyl, furan-2-ylmethyl, and  $-CH_2CH_2CH_2-NHR_{13}$ , wherein  $R_{13}$  is selected from the group consisting of methanesulfonyl, phenylsulfonyl, benzyl, isopropylaminocarbonyl, morpholine-4-carbonyl, and phenylaminocarbonyl.

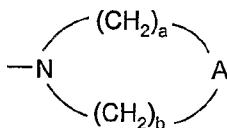
20

11. The compound or salt according to claim 7 wherein  $R_1'$  is hydrogen.

25

12. The compound or salt of claim 7 wherein  $R_1$  and  $R_1'$  are each independently alkyl.

13. The compound or salt of claim 7 wherein  $R_1$  and  $R_1'$  join to form the group:



30

14. The compound or salt according to claim 7 wherein  $R_2$  is selected from the group consisting of hydrogen, alkyl, and alkoxyalkylenyl.

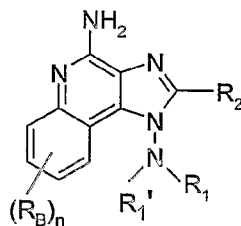
15. The compound or salt according to claim 14 wherein  $R_2$  is selected from the group consisting of hydrogen, methyl, propyl, butyl, 2-methoxyethyl, and ethoxymethyl.

16. The compound or salt according to claim 7 wherein  $n$  is 0.

17. The compound or salt according to claim 7 wherein  $n$  is 0, and  $R_3$  is selected from the group consisting of  $-Z'-R_4'$ ,  $-Z'-X'-R_4'$ , and  $-Z'-X'-Y'-R_4'$ .

18. The compound or salt according to claim 17 wherein  $R_3$  is selected from the group consisting of 2-(pyridin-3-yl)ethyl, pyridinyl, hydroxymethylpyridinyl, ethoxyphenyl, (morpholine-4-carbonyl)phenyl, 2-(methanesulfonylamino)ethoxy, and benzyloxy.

19. A compound of the Formula (I-2):



I-2

wherein:

20  $R_B$  is selected from the group consisting of alkyl, alkoxy, halogen, hydroxy, and trifluoromethyl;

$n$  is an integer from 0 to 4;

$R_1'$  is selected from the group consisting of hydrogen and alkyl;

$R_1$  is selected from the group consisting of:

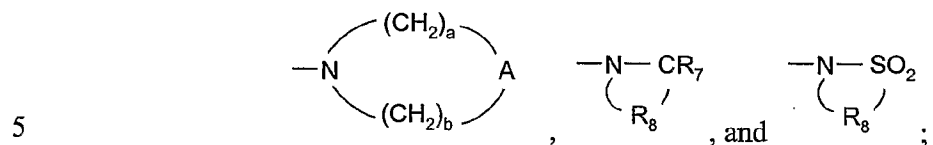
- 25
- $R_4$ ,
  - $Y-R_4$ ,
  - $X-R_5$ ,
  - $X-N(R_6)-Y-R_4$ ,



-X-C(R<sub>7</sub>)-N(R<sub>6</sub>)-R<sub>4</sub>, and

-X-O-R<sub>4</sub>;

or R<sub>1</sub>' and R<sub>1</sub> together with the nitrogen atom to which they are bonded can join to form a group selected from the group consisting of:



R<sub>2</sub> is selected from the group consisting of:

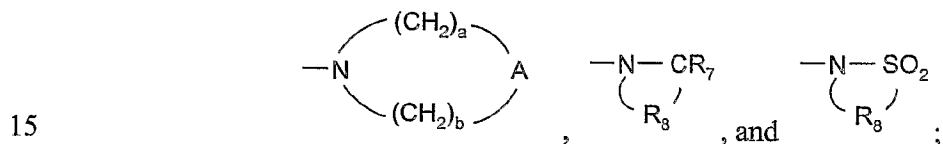
-hydrogen,  
 -alkyl,  
 -alkenyl,  
 10 -aryl,  
 -heteroaryl,  
 -heterocyclyl,  
 -alkylene-Z-alkyl,  
 -alkylene-Z-aryl,  
 15 -alkylene-Z-alkenyl, and  
 -alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:

-OH,  
 -halogen,  
 20 -N(R<sub>6</sub>)<sub>2</sub>,  
 -C(R<sub>7</sub>)-N(R<sub>6</sub>)<sub>2</sub>,  
 -S(O)<sub>2</sub>-N(R<sub>6</sub>)<sub>2</sub>,  
 -N(R<sub>6</sub>)-C(R<sub>7</sub>)-C<sub>1-10</sub> alkyl,  
 -N(R<sub>6</sub>)-S(O)<sub>2</sub>-C<sub>1-10</sub> alkyl,  
 25 -C(O)-C<sub>1-10</sub> alkyl,  
 -C(O)-O-C<sub>1-10</sub> alkyl,  
 -N<sub>3</sub>,  
 -aryl,  
 -heteroaryl,  
 30 -heterocyclyl,

-C(O)-aryl, and  
-C(O)-heteroaryl;

R<sub>4</sub> is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, heteroaryl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, carboxy, formyl, aryl, aryloxy, arylalkoxy, heteroaryl, heteroaryloxy, heteroarylalkoxy, heterocyclyl, heterocyclylalkylenyl, amino, alkylamino, (arylalkylenyl)amino, dialkylamino, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo, with the proviso that when R<sub>4</sub> is a substituted alkyl group and the substituent contains a hetero atom which bonds directly to the alkyl group then the alkyl group contains at least two carbons between the substituent and the nitrogen atom to which R<sub>1</sub> is bonded;

R<sub>5</sub> is selected from the group consisting of:



each R<sub>6</sub> is independently selected from the group consisting of hydrogen, alkyl, and arylalkylenyl;

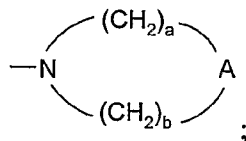
each R<sub>7</sub> is independently selected from the group consisting of =O and =S;

R<sub>8</sub> is C<sub>2-7</sub> alkylene;

20 A is selected from the group consisting of -CH(R<sub>6</sub>)-, -O-, -N(R<sub>6</sub>)-, -N(Y-R<sub>4</sub>)-, and -N(X-N(R<sub>6</sub>)-Y-R<sub>4</sub>)-;

X is C<sub>2-20</sub> alkylene;

25 Y is selected from the group consisting of -C(R<sub>7</sub>)-, -C(R<sub>7</sub>)-O-, -S(O)<sub>2</sub>-, -S(O)<sub>2</sub>-N(R<sub>6</sub>)-, and -C(R<sub>7</sub>)-N(R<sub>9</sub>)-; wherein R<sub>9</sub> is selected from the group consisting of hydrogen, alkyl, and arylalkylenyl; or R<sub>9</sub> and R<sub>4</sub> together with the nitrogen atom to which R<sub>9</sub> is bonded can join to form the group



Z is selected from the group consisting of -O- and -S(O)<sub>0-2</sub>-; and

a and b are independently integers from 1 to 4 with the proviso that when A is -O-, -N(R<sub>6</sub>)-, -N(Y-R<sub>4</sub>)-, or -N(X-N(R<sub>6</sub>)-Y-R<sub>4</sub>)- then a and b are independently integers from 2 to 4;

or a pharmaceutically acceptable salt thereof.

5

20. The compound or salt according to claim 19 wherein R<sub>1</sub> is selected from the group consisting of -R<sub>4</sub>, -Y-R<sub>4</sub>, and -X-N(R<sub>6</sub>)-Y-R<sub>4</sub> wherein Y is -C(R<sub>7</sub>)-, -S(O)<sub>2</sub>-, or -C(R<sub>7</sub>)-N(R<sub>9</sub>)-.

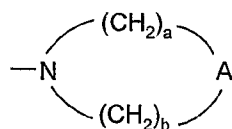
10 21. The compound or salt according to claim 20 wherein R<sub>1</sub> is selected from the group consisting of hydrogen, alkyl, alkenyl, arylalkylenyl, arylalkenylenyl, heteroarylalkylenyl, heteroarylalkenylenyl, aminoalkylenyl, alkoxyalkylenyl, acyl, alkylsulfonylaminoalkylenyl, arylsulfonylaminoalkylenyl, alkylaminocarbonyl, arylaminocarbonyl, (arylalkylenyl)aminoalkylenyl, and  
15 arylaminocarbonylaminoalkylenyl.

22. The compound or salt according to claim 21 wherein R<sub>1</sub> is selected from the group consisting of hydrogen, methyl, isopropyl, butyl, 2-methylpropyl, 1-ethylpropyl, 3-methylbutyl, cyclohexyl, benzyl, cinnamyl, furan-2-ylmethyl, and -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NHR<sub>13</sub>,  
20 wherein R<sub>13</sub> is selected from the group consisting of methanesulfonyl, phenylsulfonyl, benzyl, and phenylaminocarbonyl.

23. The compound or salt according to claim 19 wherein R<sub>1</sub>' is hydrogen.

25 24. The compound or salt of claim 19 wherein R<sub>1</sub> and R<sub>1</sub>' are each independently alkyl.

25. The compound or salt of claim 19 wherein R<sub>1</sub> and R<sub>1</sub>' join to form the group:



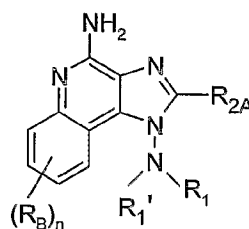
26. The compound or salt according to claim 19 wherein  $R_2$  is selected from the group consisting of hydrogen, alkyl, and alkoxyalkylenyl.

27. The compound or salt according to claim 26 wherein  $R_2$  is selected from the group consisting of hydrogen, butyl, 2-methoxyethyl, and ethoxymethyl.

28. The compound or salt according to claim 19 wherein  $n$  is 0.

29. The compound or salt according to claim 19 wherein  $n$  is 1, and  $R$  is halogen or hydroxy.

30. A compound of the Formula (I-3):



I-3

wherein:

$R_B$  is selected from alkyl, alkoxy, halogen, hydroxy, and trifluoromethyl;

$n$  is an integer from 0 to 4;

$R_1'$  is selected from hydrogen and alkyl;

$R_1$  is selected from:

- $R_4$ ,

- $Y-R_4$ ,

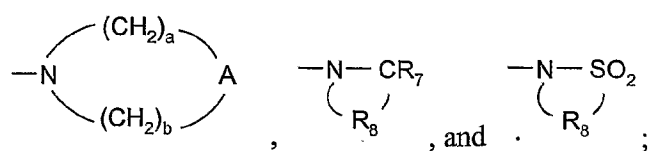
- $X-R_5$ ,

- $X-N(R_6)-Y-R_4$ ,

- $X-CR_7-N(R_6)-R_4$ , and

- $X-O-R_4$ ;

or  $R_1'$  and  $R_1$  together with the nitrogen atom to which they are bonded can join to form a group selected from:



$R_{2A}$  is selected from:

-hydrogen,

-alkyl,

5 -alkenyl,

-aryl,

-heteroaryl,

-alkylene-Z-alkyl,

-alkylene-Z-aryl,

10 -alkylene-Z- alkenyl, and

-alkyl or alkenyl substituted by one or more substituents selected from:

-OH,

-halogen,

$$-\text{N}(\text{R}_6)_2,$$

15  $-\text{CR}_7-\text{N}(\text{R}_6)_2,$

$$-\text{SO}_2-\text{N}(\text{R}_6)_2,$$

-N(R<sub>6</sub>)-CR<sub>7</sub>-C<sub>1-10</sub> alkyl,

-N(R<sub>6</sub>)-SO<sub>2</sub>-C<sub>1-10</sub> alkyl,

-C(O)-C<sub>1-10</sub> alkyl,

20  $\text{-C(O)-O-C}_{1-10}$  alkyl,

-N<sub>3</sub>,

-aryl,

-heteroaryl,

-heterocyclyl,

25 -C(O)-aryl, and

-C(O)-heteroaryl;

R<sub>4</sub> is selected from hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, and

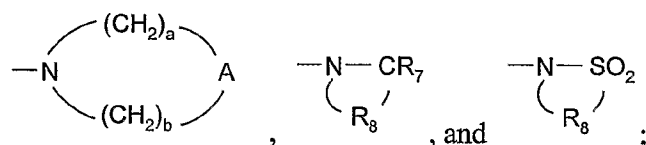
heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, heteroaryl, and heterocyclyl groups

can be unsubstituted or substituted by one or more substituents independently selected

30 from alkyl, alkoxy, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano,

carboxy, formyl, aryl, aryloxy, arylalkoxy, heteroaryl, heteroaryloxy, heteroarylalkoxy, heterocyclyl, heterocyclylalkylenyl, amino, alkylamino, (arylalkylenyl)amino, dialkylamino, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo, with the proviso that when R<sub>4</sub> is a substituted alkyl group and the substituent contains a hetero atom which bonds directly to the alkyl group then the alkyl group contains at least two carbons between the substituent and the nitrogen atom to which R<sub>1</sub> is bonded;

R<sub>5</sub> is selected from:

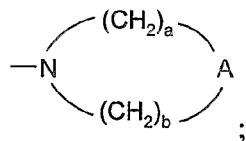


R<sub>6</sub> is selected from hydrogen, alkyl, and arylalkylenyl;

R<sub>7</sub> is selected from =O and =S;

R<sub>8</sub> is C<sub>2-7</sub> alkylene;

R<sub>9</sub> is selected from hydrogen, alkyl, and arylalkylenyl, or R<sub>9</sub> and R<sub>4</sub> together with the nitrogen atom to which R<sub>9</sub> is bonded can join to form the group



A is selected from -CHR<sub>6</sub>-, -O-, -N(R<sub>6</sub>)-, -N(Y-R<sub>4</sub>)-, and -N(X-N(R<sub>6</sub>)-Y-R<sub>4</sub>)-;

X is C<sub>2-20</sub> alkylene;

Y is selected from -CR<sub>7</sub>-, -SO<sub>2</sub>-, -SO<sub>2</sub>-N(R<sub>6</sub>)-, and -CR<sub>7</sub>-N(R<sub>9</sub>)-;

Z is selected from -O- and -S(O)<sub>0.2</sub>-;

a and b are independently integers from 1 to 4 with the proviso that when A is -O-, -N(R<sub>6</sub>)-, -N(Y-R<sub>4</sub>)-, or -N(X-N(R<sub>6</sub>)-Y-R<sub>4</sub>)- then a and b are independently integers from 2 to 4;

and pharmaceutically acceptable salts thereof.

31. The compound or salt according to claim 30 wherein R<sub>1</sub> is selected from -R<sub>4</sub>, -Y-R<sub>4</sub>, and -X-N(R<sub>6</sub>)-Y-R<sub>4</sub> wherein Y is -CR<sub>7</sub>-, -SO<sub>2</sub>-, or -CR<sub>7</sub>-N(R<sub>9</sub>)-.

32. The compound or salt according to claim 31 wherein R<sub>1</sub> is selected from the group consisting of hydrogen, alkyl, alkenyl, arylalkylenyl, arylalkenylenyl, heteroarylalkylenyl,

heteroarylalkenyl, aminoalkenyl, alkoxyalkenyl, acyl,  
alkylsulfonylaminoalkenyl, arylsulfonylaminoalkenyl, alkylaminocarbonyl,  
arylaminocarbonyl, (arylalkenyl)aminoalkenyl, and  
arylaminocarbonylaminoalkenyl.

5

33. The compound or salt according to claim 32 wherein  $R_1$  is selected from hydrogen, isopropyl, butyl, cyclohexyl, benzyl, cinnamyl, and  $-\text{CH}_2\text{CH}_2\text{CH}_2\text{-NHR}_{13}$ , wherein  $R_{13}$  is selected from methanesulfonyl, phenylsulfonyl, benzyl, and phenylaminocarbonyl.

10

34. The compound or salt according to claim 30 wherein  $R_1'$  is hydrogen.

35. The compound or salt according to claim 30 wherein  $R_{2A}$  is selected from hydrogen, alkyl, and alkoxyalkenyl.

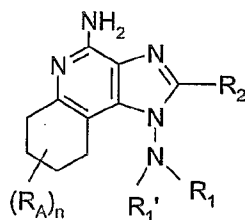
15

36. The compound or salt according to claim 35 wherein  $R_{2A}$  is selected from hydrogen, butyl, methoxyethyl, and ethoxymethyl.

37. The compound or salt according to claim 30 wherein  $n$  is 0.

20

38. A compound of the Formula (II-1):



II-1

25

wherein:

each  $R_A$  is independently selected from the group consisting of:

halogen,

hydroxy,

alkyl,  
 alkenyl,  
 haloalkyl,  
 alkoxy,  
 alkylthio,  
 -NH<sub>2</sub>,  
 -NH(alkyl), and  
 -N(alkyl)<sub>2</sub>;

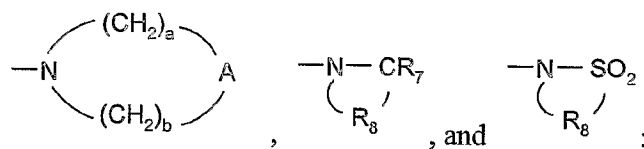
n is an integer from 0 to 4;

R<sub>1</sub>' is selected from the group consisting of hydrogen and alkyl;

R<sub>1</sub> is selected from the group consisting of:

-R<sub>4</sub>,  
 -Y-R<sub>4</sub>,  
 -X-R<sub>5</sub>,  
 -X-N(R<sub>6</sub>)-Y-R<sub>4</sub>,  
 -X-C(R<sub>7</sub>)-N(R<sub>6</sub>)-R<sub>4</sub>, and  
 -X-O-R<sub>4</sub>;

or R<sub>1</sub>' and R<sub>1</sub> together with the nitrogen atom to which they are bonded can join to form a group selected from the group consisting of:



R<sub>2</sub> is selected from the group consisting of:

-hydrogen,  
 -alkyl,  
 -alkenyl,  
 -aryl,  
 -heteroaryl,  
 -heterocyclyl,  
 -alkylene-Z-alkyl,  
 -alkylene-Z-aryl,  
 -alkylene-Z-alkenyl, and

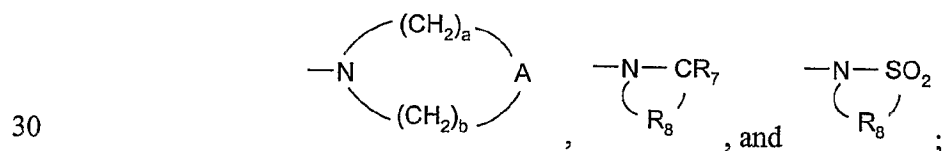


-alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:

- OH,
- halogen,
- 5 -N(R<sub>6</sub>)<sub>2</sub>,
- C(R<sub>7</sub>)-N(R<sub>6</sub>)<sub>2</sub>,
- S(O)<sub>2</sub>-N(R<sub>6</sub>)<sub>2</sub>,
- N(R<sub>6</sub>)-C(R<sub>7</sub>)-C<sub>1-10</sub> alkyl,
- N(R<sub>6</sub>)-S(O)<sub>2</sub>-C<sub>1-10</sub> alkyl,
- 10 -C(O)-C<sub>1-10</sub> alkyl,
- C(O)-O-C<sub>1-10</sub> alkyl,
- N<sub>3</sub>,
- aryl,
- heteroaryl,
- 15 -heterocyclyl,
- C(O)-aryl, and
- C(O)-heteroaryl;

R<sub>4</sub> is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, heteroaryl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, carboxy, formyl, aryl, aryloxy, arylalkoxy, heteroaryl, heteroaryloxy, heteroarylalkoxy, heterocyclyl, heterocyclylalkylenyl, amino, alkylamino, (arylalkylenyl)amino, dialkylamino, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo, with the proviso that when R<sub>4</sub> is a substituted alkyl group and the substituent contains a hetero atom which bonds directly to the alkyl group then the alkyl group contains at least two carbons between the substituent and the nitrogen atom to which R<sub>1</sub> is bonded;

R<sub>5</sub> is selected from the group consisting of:



each  $R_6$  is independently selected from the group consisting of hydrogen, alkyl, and arylalkylenyl;

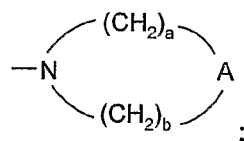
each  $R_7$  is independently selected from the group consisting of  $=O$  and  $=S$ ;

$R_8$  is  $C_{2-7}$  alkylene;

5 A is selected from the group consisting of  $-CH(R_6)-$ ,  $-O-$ ,  $-N(R_6)-$ ,  $-N(Y-R_4)-$ , and  $-N(X-N(R_6)-Y-R_4)-$ ;

X is  $C_{2-20}$  alkylene;

Y is selected from the group consisting of  $-C(R_7)-$ ,  $-C(R_7)-O-$ ,  $-S(O)_2-$ ,  $-S(O)_2-N(R_6)-$ , and  $-C(R_7)-N(R_9)-$ ; wherein  $R_9$  is selected from the group consisting of  
10 hydrogen, alkyl, and arylalkylenyl; or  $R_9$  and  $R_4$  together with the nitrogen atom to which  $R_9$  is bonded can join to form the group



Z is selected from the group consisting of  $-O-$  and  $-S(O)_{0-2}-$ ; and

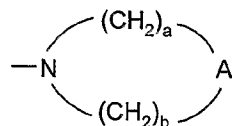
a and b are independently integers from 1 to 4 with the proviso that when A is  
15  $-O-$ ,  $-N(R_6)-$ ,  $-N(Y-R_4)-$ , or  $-N(X-N(R_6)-Y-R_4)-$  then a and b are independently integers from 2 to 4;

or a pharmaceutically acceptable salt thereof.

39. The compound or salt according to claim 38 wherein  $R_1$  is selected from the group  
20 consisting of  $-R_4$ ,  $-Y-R_4$ , and  $-X-N(R_6)-Y-R_4$  wherein Y is  $-C(R_7)-$ ,  $-S(O)_2-$ , or  $-C(R_7)-N(R_9)-$ .

40. The compound or salt according to claim 39 wherein  $R_1$  is selected from the group  
25 consisting of hydrogen, alkyl, alkenyl, arylalkylenyl, arylalkenylenyl, heteroarylalkylenyl, heteroarylalkenylenyl, aminoalkylenyl, alkoxyalkylenyl, acyl, alkylsulfonylaminoalkylenyl, arylsulfonylaminoalkylenyl, alkylaminocarbonyl, arylaminocarbonyl, (arylalkylenyl)aminoalkylenyl, and arylaminocarbonylaminoalkylenyl.

41. The compound or salt according to claim 39 wherein  $R_1$  is selected from the group consisting of hydrogen, alkyl, alkenyl, arylalkylenyl, arylalkenylenyl, heteroarylalkylenyl, heteroarylalkenylenyl, aminoalkylenyl, alkoxyalkylenyl, acyl, alkylsulfonylaminoalkylenyl, arylsulfonylaminoalkylenyl, alkylaminocarbonyl, arylaminocarbonyl, (arylalkylenyl)aminoalkylenyl, heterocyclylcarbonylaminoalkylenyl, and arylaminocarbonylaminoalkylenyl.
42. The compound or salt according to claim 40 wherein  $R_1$  is selected from the group consisting of hydrogen, methyl, isopropyl, butyl, 2-methylpropyl, 1-ethylpropyl, 3-methylbutyl, cyclohexyl, benzyl, cinnamyl, furan-2-ylmethyl, and  $-\text{CH}_2\text{CH}_2\text{CH}_2\text{-NHR}_{13}$ , wherein  $R_{13}$  is selected from the group consisting of methanesulfonyl, phenylsulfonyl, benzyl, and phenylaminocarbonyl.
43. The compound or salt according to claim 41 wherein  $R_1$  is selected from the group consisting of hydrogen, methyl, isopropyl, butyl, 2-methylpropyl, 1-ethylpropyl, 3-methylbutyl, cyclohexyl, benzyl, 3-phenylpropyl, cinnamyl, furan-2-ylmethyl, and  $-\text{CH}_2\text{CH}_2\text{CH}_2\text{-NHR}_{13}$ , wherein  $R_{13}$  is selected from the group consisting of methanesulfonyl, phenylsulfonyl, benzyl, isopropylaminocarbonyl, morpholine-4-carbonyl, and phenylaminocarbonyl.
44. The compound or salt according to claim 38 wherein  $R_1'$  is hydrogen.
45. The compound or salt of claim 38 wherein  $R_1$  and  $R_1'$  are each independently alkyl.
46. The compound or salt of claim 38 wherein  $R_1$  and  $R_1'$  join to form the group:



47. The compound or salt according to claim 38 wherein  $R_2$  is selected from the group consisting of hydrogen, alkyl, and alkoxyalkylenyl.

48. The compound or salt according to claim 47 wherein R<sub>2</sub> is selected from the group consisting of hydrogen, butyl, 2-methoxyethyl, and ethoxymethyl.
49. The compound or salt according to claim 47 wherein R<sub>2</sub> is selected from the group consisting of hydrogen, methyl, propyl, butyl, 2-methoxyethyl, and ethoxymethyl.
50. The compound or salt according to claim 38 wherein n is 0.
51. A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 1 and a pharmaceutically acceptable carrier.
52. A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 5 and a pharmaceutically acceptable carrier.
53. A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 7 and a pharmaceutically acceptable carrier.
54. A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 19 and a pharmaceutically acceptable carrier.
55. A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 30 and a pharmaceutically acceptable carrier.
56. A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 38 and a pharmaceutically acceptable carrier.
57. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 1 to the animal.

58. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 5 to the animal.

5 59. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 7 to the animal.

60. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 19 to the animal.

10

61. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 30 to the animal.

15

62. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 38 to the animal.

63. A method of treating a viral disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound or salt of claim 1.

20

64. A method of treating a viral disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound or salt of claim 5.

25

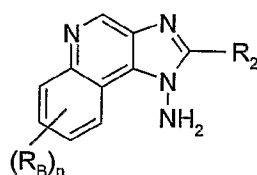
65. A method of treating a viral disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound or salt of claim 7.

66. A method of treating a viral disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound or salt of claim 19.
- 5 67. A method of treating a viral disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound or salt of claim 30.
- 10 68. A method of treating a viral disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound or salt of claim 38.
- 15 69. A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound or salt of claim 1.
- 20 70. A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound or salt of claim 5.
71. A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound or salt of claim 7.
- 25 72. A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound or salt of claim 19.

73. A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound or salt of claim 30.

5 74. A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound or salt of claim 38.

75. A compound of the Formula (VII):



VII

wherein:

each  $R_B$  is independently selected from the group consisting of alkyl, alkoxy,  
15 halogen, hydroxy, and trifluoromethyl;

$n$  is an integer from 0 to 4;

$R_2$  is selected from the group consisting of:

-hydrogen,  
-alkyl,  
20 -alkenyl,  
-aryl,  
-heteroaryl,  
-heterocyclyl,  
-alkylene-Z-alkyl,  
25 -alkylene-Z-aryl,  
-alkylene-Z-alkenyl, and  
-alkyl or alkenyl substituted by one or more substituents selected from the  
group consisting of:

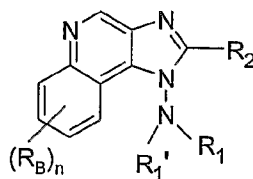
- OH,  
 -halogen,  
 -N(R<sub>6</sub>)<sub>2</sub>,  
 -C(R<sub>7</sub>)-N(R<sub>6</sub>)<sub>2</sub>,  
 5      -S(O)<sub>2</sub>-N(R<sub>6</sub>)<sub>2</sub>,  
         -N(R<sub>6</sub>)-C(R<sub>7</sub>)-C<sub>1-10</sub> alkyl,  
         -N(R<sub>6</sub>)-S(O)<sub>2</sub>-C<sub>1-10</sub> alkyl,  
         -C(O)-C<sub>1-10</sub> alkyl,  
         -C(O)-O-C<sub>1-10</sub> alkyl,  
 10      -N<sub>3</sub>,  
         -aryl,  
         -heteroaryl,  
         -heterocyclyl,  
         -C(O)-aryl, and  
 15      -C(O)-heteroaryl;

each R<sub>6</sub> is independently selected from the group consisting of hydrogen, alkyl, and arylalkylenyl;

R<sub>7</sub> is selected from the group consisting of =O and =S; and

Z is selected from the group consisting of -O- and -S(O)<sub>0-2</sub>;  
 20      or a pharmaceutically acceptable salt thereof.

76. A compound of the Formula (IX):



IX

wherein:

each R<sub>B</sub> is independently selected from the group consisting of alkyl, alkoxy, halogen, hydroxy, and trifluoromethyl;

n is an integer from 0 to 4;

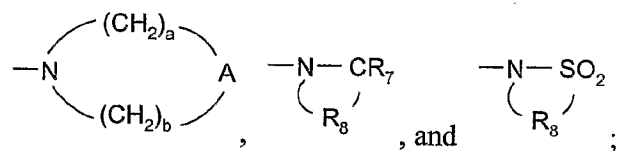


R<sub>1</sub>' is hydrogen or alkyl;

R<sub>1</sub> is selected from the group consisting of:

-R<sub>4</sub>,  
 -Y-R<sub>4</sub>,  
 -X-R<sub>5</sub>,  
 -X-N(R<sub>6</sub>)-Y-R<sub>4</sub>,  
 -X-C(R<sub>7</sub>)-N(R<sub>6</sub>)-R<sub>4</sub>, and  
 -X-O-R<sub>4</sub>;

or R<sub>1</sub>' and R<sub>1</sub> together with the nitrogen atom to which they are bonded can join to form a group selected from the group consisting of:



R<sub>2</sub> is selected from the group consisting of:

-hydrogen,  
 -alkyl,  
 -alkenyl,  
 -aryl,  
 -heteroaryl,  
 -heterocyclyl,  
 -alkylene-Z-alkyl,  
 -alkylene-Z-aryl,  
 -alkylene-Z-alkenyl, and

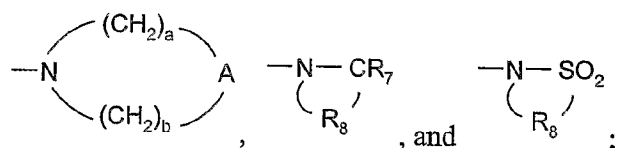
-alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:

-OH,  
 -halogen,  
 -N(R<sub>6</sub>)<sub>2</sub>,  
 -C(R<sub>7</sub>)-N(R<sub>6</sub>)<sub>2</sub>,  
 -S(O)<sub>2</sub>-N(R<sub>6</sub>)<sub>2</sub>,  
 -N(R<sub>6</sub>)-C(R<sub>7</sub>)-C<sub>1-10</sub> alkyl,  
 -N(R<sub>6</sub>)-S(O)<sub>2</sub>-C<sub>1-10</sub> alkyl,

- 5
- C(O)-C<sub>1-10</sub> alkyl,
  - C(O)-O-C<sub>1-10</sub> alkyl,
  - N<sub>3</sub>,
  - aryl,
  - heteroaryl,
  - heterocyclyl,
  - C(O)-aryl, and
  - C(O)-heteroaryl;

10 R<sub>4</sub> is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, heteroaryl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, carboxy, formyl, aryl, aryloxy, arylalkoxy, heteroaryl, heteroaryloxy, heteroarylalkoxy, heterocyclyl, heterocyclylalkylenyl, amino, 15 alkylamino, (arylalkylenyl)amino, dialkylamino, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo, with the proviso that when R<sub>4</sub> is a substituted alkyl group and the substituent contains a hetero atom which bonds directly to the alkyl group then the alkyl group contains at least two carbons between the substituent and the nitrogen atom to which R<sub>1</sub> is bonded;

20 R<sub>5</sub> is selected from the group consisting of



each R<sub>6</sub> is independently selected from the group consisting of hydrogen, alkyl, and arylalkylenyl;

each R<sub>7</sub> is independently selected from the group consisting of =O and =S;

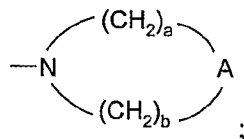
25 R<sub>8</sub> is C<sub>2-7</sub> alkylene;

A is selected from the group consisting of -CH(R<sub>6</sub>)-, -O-, -N(R<sub>6</sub>)-, -N(Y-R<sub>4</sub>)-, and -N(X-N(R<sub>6</sub>)-Y-R<sub>4</sub>)-;

X is C<sub>2-20</sub> alkylene;

Y is selected from the group consisting of -C(R<sub>7</sub>)-, -C(R<sub>7</sub>)-O-, -S(O)<sub>2</sub>-,

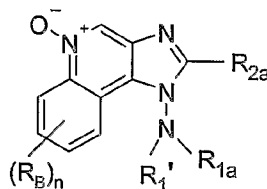
-S(O)<sub>2</sub>-N(R<sub>6</sub>)-, and -C(R<sub>7</sub>)-N(R<sub>9</sub>)-; wherein R<sub>9</sub> is selected from the group consisting of hydrogen, alkyl, and arylalkylenyl; or R<sub>9</sub> and R<sub>4</sub> together with the nitrogen atom to which R<sub>9</sub> is bonded can join to form the group



- 5            Z is selected from the group consisting of -O- and -S(O)<sub>0-2</sub>-; and  
               a and b are independently integers from 1 to 4 with the proviso that when A is  
               -O-, -N(R<sub>6</sub>)-, -N(Y-R<sub>4</sub>)-, or -N(X-N(R<sub>6</sub>)-Y-R<sub>4</sub>)- then a and b are independently integers  
               from 2 to 4;  
               or a pharmaceutically acceptable salt thereof.

10

77.    A compound of the Formula (X):

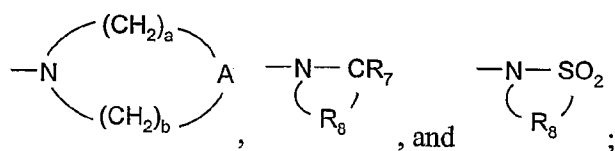


X

wherein:

- 15            each R<sub>B</sub> is independently selected from the group consisting of alkyl, alkoxy,  
               halogen, hydroxy, and trifluoromethyl;  
               n is an integer from 0 to 4;  
               R<sub>1</sub>' is hydrogen or alkyl;  
               R<sub>1a</sub> is selected from the group consisting of:  
 20            -R<sub>4a</sub>,  
               -Y-R<sub>4a</sub>,  
               -X-R<sub>5</sub>,  
               -X-N(R<sub>6</sub>)-Y-R<sub>4a</sub>,  
               -X-C(R<sub>7</sub>)-N(R<sub>6</sub>)-R<sub>4a</sub>, and  
 25            -X-O-R<sub>4a</sub>;

              or R<sub>1</sub>' and R<sub>1a</sub> together with the nitrogen atom to which they are bonded can join to  
               form a group selected from the group consisting of:



R<sub>2a</sub> is selected from the group consisting of:

-hydrogen,

-alkyl,

5 -alkenyl,

-aryl,

-alkylene-Z"-alkyl,

-alkylene-Z"-aryl,

-alkylene-Z"- alkenyl, and

10 -alkyl or alkenyl substituted by one or more substituents selected from the  
group consisting of:

-OH,

-halogen.

$$-\text{N}(\text{R}_6)_2,$$

15  $-\text{C}(\text{R}_7)-\text{N}(\text{R}_6)_2$ .

$$-\text{S}(\text{O})_2-\text{N}(\text{R}_6)_2,$$

-N(R<sub>6</sub>)-C(R<sub>7</sub>)-C<sub>1-10</sub> alkyl,

-N(R<sub>6</sub>)-S(O)<sub>2</sub>-C<sub>1-10</sub> alkyl,

-C(O)-C<sub>1-10</sub> alkyl,

20 -C(O)-O-C<sub>1-10</sub> alkyl,

-N<sub>3</sub>,

-aryl,

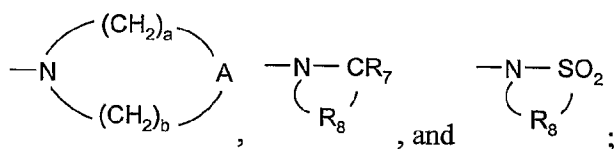
-heterocyclyl, and

-C(O)-aryl;

25 R<sub>4a</sub> is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, cyano, carboxy, formyl, aryl, aryloxy, arylalkoxy, heterocyclyl, heterocyclylalkylenyl, amino, 30 alkylamino, (arylalkylenyl)amino, dialkylamino, and in the case of alkyl, alkenyl, alkynyl,

and heterocyclyl, oxo, with the proviso that when  $R_{4a}$  is a substituted alkyl group and the substituent contains a hetero atom which bonds directly to the alkyl group then the alkyl group contains at least two carbons between the substituent and the nitrogen atom to which  $R_1$  is bonded;

5  $R_5$  is selected from the group consisting of



each  $R_6$  is independently selected from the group consisting of hydrogen, alkyl, and arylalkylenyl;

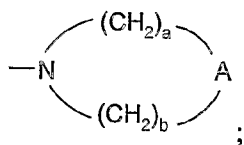
each  $R_7$  is independently selected from the group consisting of =O and =S;

10  $R_8$  is  $C_{2-7}$  alkylene;

A is selected from the group consisting of  $-\text{CH}(R_6)-$ ,  $-\text{O}-$ ,  $-\text{N}(R_6)-$ ,  $-\text{N}(Y-R_4)-$ , and  $-\text{N}(X-\text{N}(R_6)-Y-R_4)-$ ;

X is  $C_{2-20}$  alkylene;

Y is selected from the group consisting of  $-\text{C}(R_7)-$ ,  $-\text{C}(R_7)-\text{O}-$ ,  $-\text{S}(\text{O})_2-$ ,  
15  $-\text{S}(\text{O})_2-\text{N}(R_6)-$ , and  $-\text{C}(R_7)-\text{N}(R_9)-$ ; wherein  $R_9$  is selected from the group consisting of hydrogen, alkyl and arylalkylenyl, or  $R_9$  and  $R_4$  together with the nitrogen atom to which  $R_9$  is bonded can join to form the group

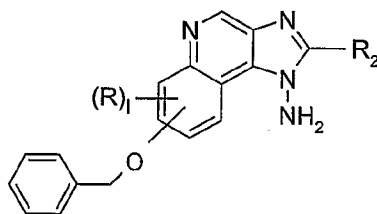


$Z''$  is selected from the group consisting of  $-\text{O}-$  and  $-\text{S}(\text{O})_2-$ ; and

20 a and b are independently integers from 1 to 4 with the proviso that when A is  $-\text{O}-$ ,  $-\text{N}(R_6)-$ ,  $-\text{N}(Y-R_4)-$ , or  $-\text{N}(X-\text{N}(R_6)-Y-R_4)-$  then a and b are independently integers from 2 to 4;

or a pharmaceutically acceptable salt thereof.

78. A compound of the Formula (XLII):



XLII

5 wherein:

R is selected from the group consisting of alkyl, alkenyl, alkoxy, halogen, fluoroalkyl, hydroxy, amino, alkylamino, and dialkylamino;

1 is 0 or 1;

R<sub>2</sub> is selected from the group consisting of:

- 10                    -hydrogen,
- alkyl,
- alkenyl,
- aryl,
- heteroaryl,
- 15                   -heterocyclyl,
- alkylene-Z-alkyl,
- alkylene-Z-aryl,
- alkylene-Z-alkenyl, and
- alkyl or alkenyl substituted by one or more substituents selected from the
- 20                   group consisting of:
- OH,
- halogen,
- N(R<sub>6</sub>)<sub>2</sub>,
- C(R<sub>7</sub>)-N(R<sub>6</sub>)<sub>2</sub>,
- 25                   -S(O)<sub>2</sub>-N(R<sub>6</sub>)<sub>2</sub>,
- N(R<sub>6</sub>)-C(R<sub>7</sub>)-C<sub>1-10</sub> alkyl,
- N(R<sub>6</sub>)-S(O)<sub>2</sub>-C<sub>1-10</sub> alkyl,
- C(O)-C<sub>1-10</sub> alkyl,

-C(O)-O-C<sub>1-10</sub> alkyl,

-N<sub>3</sub>,

-aryl,

-heteroaryl,

5

-heterocyclyl,

-C(O)-aryl, and

-C(O)-heteroaryl;

each R<sub>6</sub> is independently selected from the group consisting of hydrogen, alkyl, and arylalkylenyl;

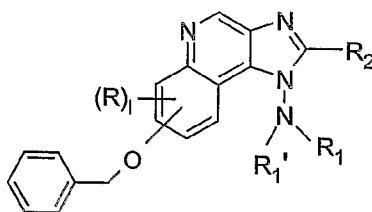
10

R<sub>7</sub> is selected from the group consisting of =O and =S; and

Z is selected from the group consisting of -O- and -S(O)<sub>0-2</sub>;  
or a pharmaceutically acceptable salt thereof.

79. A compound of the Formula (XLIII):

15



XLIII

wherein:

R is selected from the group consisting of alkyl, alkenyl, alkoxy, halogen, fluoroalkyl, hydroxy, amino, alkylamino, and dialkylamino;

20

l is 0 or 1;

R<sub>1</sub>' is hydrogen or alkyl;

R<sub>1</sub> is selected from the group consisting of:

-R<sub>4</sub>,

25

-Y-R<sub>4</sub>,

-X-R<sub>5</sub>,

-X-N(R<sub>6</sub>)-Y-R<sub>4</sub>,

-X-C(R<sub>7</sub>)-N(R<sub>6</sub>)-R<sub>4</sub>, and

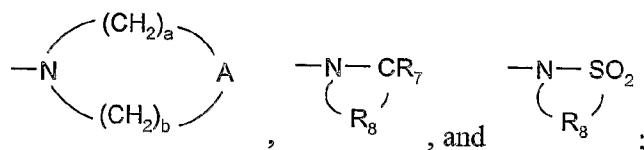




-C(O)-heteroaryl;

R<sub>4</sub> is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, heteroaryl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, carboxy, formyl, aryl, aryloxy, arylalkoxy, heteroaryl, heteroaryloxy, heteroarylalkoxy, heterocyclyl, heterocyclylalkylenyl, amino, alkylamino, (arylalkylenyl)amino, dialkylamino, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo, with the proviso that when R<sub>4</sub> is a substituted alkyl group and the substituent contains a hetero atom which bonds directly to the alkyl group then the alkyl group contains at least two carbons between the substituent and the nitrogen atom to which R<sub>1</sub> is bonded;

$R_5$  is selected from the group consisting of



15 each R<sub>6</sub> is independently selected from the group consisting of hydrogen, alkyl, and arylalkylenyl;

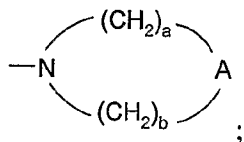
each R<sub>7</sub> is independently selected from the group consisting of =O and =S;

R<sub>8</sub> is C<sub>2-7</sub> alkylene;

20 A is selected from the group consisting of -CH(R<sub>6</sub>)-, -O-, -N(R<sub>6</sub>)-, -N(Y-R<sub>4</sub>)-, and -N(X-N(R<sub>6</sub>)-Y-R<sub>4</sub>)-;

X is C<sub>2-20</sub> alkylene:

Y is selected from the group consisting of -C(R<sub>7</sub>)-, -C(R<sub>7</sub>)-O-, -S(O)<sub>2</sub>-,  
-S(O)<sub>2</sub>-N(R<sub>6</sub>)-, and -C(R<sub>7</sub>)-N(R<sub>9</sub>)-; wherein R<sub>9</sub> is selected from the group consisting of  
hydrogen, alkyl, and arylalkylenyl; or R<sub>9</sub> and R<sub>4</sub> together with the nitrogen atom to which  
25 R<sub>9</sub> is bonded can join to form the group



Z is selected from the group consisting of -O- and -S(O)<sub>0-2</sub>-; and

a and b are independently integers from 1 to 4 with the proviso that when A is

-O-, -N(R<sub>6</sub>)-, -N(Y-R<sub>4</sub>)-, or -N(X-N(R<sub>6</sub>)-Y-R<sub>4</sub>)- then a and b are independently integers from 2 to 4;  
or a pharmaceutically acceptable salt thereof.